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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/730,471

12/08/2003

Michael Kaiser

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EXAMINER

ZIMMERMAN, JOSHUA D

ART UNIT

PAPER NUMBER

2854

MAIL DATE

DELIVERY MODE

01/25/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/730,471	Applicant(s) KAISER ET AL.	
	Examiner JOSHUA D. ZIMMERMAN	Art Unit 2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/09/09 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' Admitted Prior Art (AAPA).

Regarding claim 11, AAPA teaches "a method for digital imaging of a printing form through application of energy (paragraph 0002 of applicants' specification) the method comprising the steps of:

establishing at least one reference point within image data of an image to be imaged onto a printing form (paragraph 0006; paragraph 0008: 'certain positions' which are to be 'un-set');

modifying the image data to leave in place the at least one reference point as at least one supporting point (paragraph 0006; paragraph 0008: the replacing of set bits by un-set bits; Figure 5B);

applying energy to create burn-off within the image spots around the at least one supporting point in a burn-off area (paragraph 0005);

detaching burn-off from the burn-off area from the printing form in a cleaning step (paragraph 0005).”

AAPA fails to teach:

- a) establishing ... a limit value for a number of image spots within a surrounding area of the at least one reference point;
- b) examining a plurality of image spots in the surrounding area of the at least one reference point in the image data and comparing the number of image spots to be imaged within the surrounding area with the limit value with the image processing unit.
- c) that the modification of the image data is done if the number of image spots to be imaged in a surrounding area of the at least one reference point exceeds a limit value and a boundary area in the surrounding area around the reference point contains only image spots to be imaged

However AAPA teaches that large areas which are to be imaged result in large burn-off areas which results in lack of control of the cleaning process (paragraph 0005). AAPA further teaches that in order to prevent the uncontrolled detachment of burn-off areas, the image data is modified such that at least one reference point in the image data is made a supporting point in the printing form (paragraph 0006). Doing so

increases the residual adhesion of the imaged area surrounding the reference point (penultimate sentence of paragraph 0005). Furthermore, AAPA teaches that the number of supporting points has to be kept as low as possible (last sentence of paragraph 0008) because too many points results in individual supporting points becoming visible in the printing image (paragraph 0009).

In other words, AAPA teaches that the number of supporting points is a results-effective variable which affects the residual adhesion of the imaged area surrounding the supporting points, which affects the uncontrolled detachment of burn-off, thereby ultimately affecting the control of the cleaning process.

This is a similar situation to construction of a bridge or platform, in that one must provide sufficient support while at the same time minimizing use of materials by using as few support structures as possible. In so doing, one chooses an appropriate limit value of weight which is not meant to be exceeded, which corresponds to the location (space between supports) and number of supports.

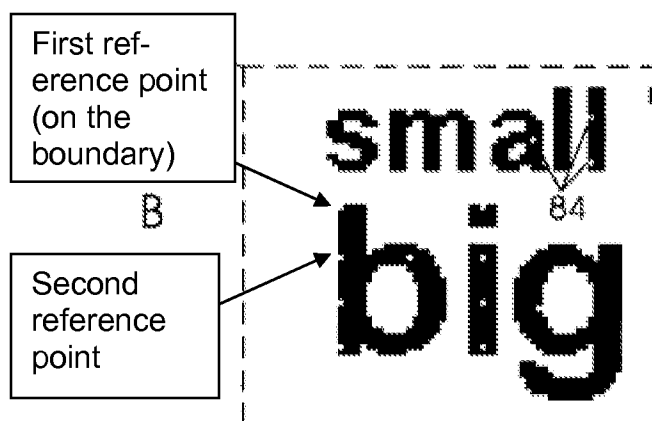
Therefore, at the time of the invention, it would have been obvious to one having ordinary skill in the art to optimize the residual adhesion of the imaged areas by optimizing the number of supporting points and the space between them to achieve the **predictable result** of providing sufficient support structure to burn-off areas such that uncontrolled detachment of burn-off areas does not occur, thus allowing for a controlled cleaning of the printing form.

Regarding claim 2, AAPA further teaches “wherein the number of image spots to be imaged in a surrounding area of a reference point is determined in an analysis of the image data represented in digital form as a bit field (paragraph 0008).”

Regarding claim 3, AAPA as modified further teaches “a calibration step prior to the leaving in place step wherein the distance from a first reference point to a second reference point of the at least one reference point is determined.” This limitation is inherently met in the optimization step of the modification.

Regarding claim 4, AAPA further teaches “wherein the at least one reference point includes a plurality of reference points distributed in the image data a uniform grid over a representation of printing area of the printing form (see figure 5B).”

Regarding claim 5, AAPA further teaches “wherein the distance from a first reference point to a second reference point of the at least one reference point matches an extent of the boundary area (see the marked area of figure 5 below).”



Regarding claim 6, AAPA discloses “a system for digital imaging of printing forms in a method as recited in claim 11 (paragraph 0005), the system comprising:

an energy source (last sentence of paragraph 0003),
a cleaning unit (paragraph 0005, line 4),
a control unit (an inherent feature of the system disclosed in paragraph 0005),
and

an image processing unit with a computing unit, wherein in the computing unit of the image processing unit a program is executable (an inherent property of the image processing unit described in paragraph 0008), the program having at least one executable step determining whether the limit value has been exceeded at a number of positions in a bit field representing the image data in digital form, the positions corresponding to the reference points (when modifying the method of AAPA as discussed above with regards to claim 11, one having ordinary skill in the art would logically modify the image processing unit to perform this function)."

Regarding claim 7, AAPA further discloses "wherein the image processing unit includes a raster image processor (this is an inherent feature of the digital processing described in the first sentence of paragraph 0008) and a data buffer for the image data represented in digital form as a bit field (first sentence of paragraph 0008)."

Regarding claim 8, AAPA further discloses "wherein the program has at least one executable step for modifying the bit field in at least one area at the positions at which the limit value is exceeded (when modifying the method of AAPA as discussed above with regards to claim 11, one having ordinary skill in the art would logically modify the image processing unit to perform this function)."

Regarding claim 9, AAPA further discloses “a printing unit comprising a system for imaging as recited in claim 6 (first line of paragraph 0005).”

Regarding claim 10, AAPA further discloses “a printing press comprising a printing unit as recited in claim 9 (first sentence of paragraph 0005).”

Response to Arguments

3. Applicants’ arguments with respect to all the claims have been considered but are moot in view of the new grounds of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSHUA D. ZIMMERMAN whose telephone number is (571)272-2749. The examiner can normally be reached on M-R 8:30A - 6:00P, Alternate Fridays 8:30A-5:00P.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Joshua D Zimmerman
Examiner
Art Unit 2854

/Joshua D Zimmerman/
Examiner, Art Unit 2854